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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/668,308	09/24/2003	Tadanobu Yoshikawa	00684.003522	4304
5514	7590	12/22/2004	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO			BRASE, SANDRA L	
30 ROCKEFELLER PLAZA			ART UNIT	
NEW YORK, NY 10112			PAPER NUMBER	
			2852	

DATE MAILED: 12/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/668,308

**Applicant(s)**

YOSHIKAWA, TADANOBU

**Examiner**

Sandra L. Brase

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 9/24/03 & 10/14/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character “S4” has been used to designate both a power supply of the toner charger and a power supply of the developer member. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: S2. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any

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required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

3. The disclosure is objected to because of the following informalities.

Appropriate correction is required.

On page 22, line 12, “pat” should be changed to “part”.

On page 23, line 4, “rotating” should be changed to “moving the peripheral surfaces of”.

On page 24, line 22, “provide” should be changed to “provided”.

***Claim Objections***

4. Claims 3 and 7 are objected to because of the following informalities. Appropriate correction is required.

On line 3 of claim 3, “said transfer residual toner” should be changed to “toner charging means”.

On line 5 of claim 3, “history” should be deleted.

On line 2 of claim 7, “different from” should be changed to “the same as” to correspond with the figures, where both the image bearing member and the developer bearing member rotate in a counterclockwise direction.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al. (US 2002/0057925) in view of Yamaki et al. (US 6,026,259) and Sasai (US 2002/0127025).

7. Watanabe et al. (...925) disclose an image forming apparatus, comprising: an image bearing member (1) to be moved rotationally, charging means (2) for electrically charging the image bearing member and toner remaining on the image bearing member, where the charging means contacts the image bearing member ([0036] and figure 1), electrostatic latent image forming means (3) for forming an electrostatic latent image on the image bearing member charged by the charging means, developing means (4) for visualizing the electrostatic latent image while recovering the toner remaining on the image bearing member, toner charging means (8) which is disposed upstream from the charging means in a rotational direction of the image bearing member (figure 1) and is supplied with a voltage of a polarity identical to that of a voltage applied to the charging means to electrostatically charge the toner remaining on the image bearing member ([0038]-[0041] and [0075]), and an electrostatic latent image erase means (7) which is disposed upstream of the toner charging means in the rotational direction of the image bearing member (figure 1) and is supplied with a voltage of a polarity opposite from that of the voltage applied to the charging means to erase an electrostatic latent image on the image

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bearing member ([0038]-[0041] and [0074]). The charging means is supplied with a DC voltage which is lower than that supplied to the toner charging means in terms of an absolute value ([0038] – [0041] and [0082]). The charging means can be a brush shaped member ([0102]). The developing means comprises a magnetic brush comprising a magnetic carrier and toner, where the magnetic brush contacts the image bearing member ([0052] – [0054] and figure 1). The image bearing member and the developer bearing member for bearing the magnetic brush both move in a counterclockwise direction (figure 1). However, Watanabe et al. (...925) do not disclose the claimed recording means and control means. Yamaki et al. (...259) disclose an image forming apparatus including a toner charging means and a erase means (col. 7, lines 11-20 and col. 8, lines 35-59), where the voltage applied thereto is controlled in response to the number of sheets printed (col. 12, lines 61-65). It would have been obvious to one of ordinary skill in the art at the time of the invention to have the voltage supplied to the toner charging means and the erase means controlled on the basis of operation history of the image forming apparatus, as disclosed by Yamaki et al. (...259), since it is well known in the art to take into account operation history to control voltages supplied. Sasai (...025) discloses an image forming apparatus including a recording means for recording an operation history of the image forming apparatus ([0031]), and a control means (12) that controls a voltage accordingly. It would have been obvious to one of ordinary skill in the art at the time of the invention to have the claimed recording means with a control means to control a voltage according to the recorded information, as disclosed by Sasai (...025), since such is well known in the art to record information for control purposes.

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***Prior Art***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ohtaka et al. (US 5,294,961), Furuya (US 6,006,055), Takeda et al. (US 6,215,967) and Ozawa et al. (US 6,345,162) disclose a toner charging means.

***Inquiry***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sandra L. Brase whose telephone number is (571) 272-2131. The examiner can normally be reached on Monday-Thursday and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur T. Grimley, can be reached on (571) 272-2136. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Sandra L. Brase  
Primary Examiner  
Art Unit 2852

December 20, 2004